

SYNONYMICAL AND DESCRIPTIVE NOTES ON NORTH AMERICAN HETEROPTERA.

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Thyreocoris pulicarius, Germar.

Dr. Distant has very kindly compared for me specimens of our northern and southern forms of this insect with the type of *Corimelena marginella*, Dallas, and assures me that that species is identical with our smaller southern form, and he agrees with me in placing this under the name *pulicarius*, Germar. Whether our larger northern form is a distinct species or merely a variation of *pulicarius* is a question on which I am still in doubt.

Brochymena Harrisii, Uhler.

An examination of Uhler's type in the Harris collection shows this to be a synonym of *annulata*, Fabr. Dr. Uhler's identification of *annulata*, published in connection with his description of *Harrisii*, really refers to *4-pustulata*, Fabr., as pointed out by me in my Annotated Catalogue of our North American Pentatomidæ. This leaves without a name the species cited by me as *Harrisii* in the paper above mentioned, which I now describe as

Brochymena punctata, n. sp.

Brochymena Harrisii, Van D., Trans. Am. Ent. Soc., XXX, p. 31, 1904.

Smaller than *annulata*, with the head more truncated at apex; pronotum, scutellum and elytra distinctly dotted with smooth white points. Length, 14-15 mm.

Apex of the head very obtusely angled, almost truncated, the inner angle of the cheeks scarcely meeting over the apex of the tylus. First antennal joint almost attaining the tip of the head, second and third respectively longer, the fourth equal to the third. Pronotum hardly as wide as in *annulata*; the humeri less produced, and the anterior lobe with coarser and more irregular denticulations; the posterior lobe quite distinctly denticulate on the latero-anterior margin; the surface closely and quite regularly punctured with fuscous on a whitish ground; anteriorly with the dark punctures segregated along the submargins and in two oval patches at the inner angles of the callosities; the median line carinate and smooth anteriorly. Scutellum shorter and more rounded at apex than in *annulata*, punctured with blackish on a pale ground, and marked with

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a few scattering larger black pits, and a cluster of the same at each basal angle, intercepted by an oblique pale callous. Elytra pale, with distinct dusky punctures, which become finer and confluent in areas posteriorly on the disk; the surface sprinkled with conspicuous white calloused points, which are found more indefinitely on the scutellum and pronotum. Membrane more irregularly and obscurely veined than in the allied species. Connexivum conspicuously alternated. Legs, base of the antennæ and the rostrum ferruginous or obscure brown; the black apex of the latter attaining the base of the third ventral segment. Genital segment of the male short, of almost equal length across its whole width, the broad apical sinus subangular.

Described from one male and two female specimens received from the Georgia State collection. These were captured in Georgia, but I have seen others from Virginia. The short, square head, white points on the elytra, and imperfect white points and black pits on the pronotum and scutellum will distinguish this species.

Genus PERILLUS, Stal.

In the Genera Insectorum, Asopinæ, Schouteden has divided this genus into two, restricting the name *Perillus* to one species (*confluens*), as represented in our fauna, and establishing a new genus, *Perilloides*, for our other species—*bioculatus*, *circumcinctus*, *splendidus* and *exaptus*.

Genus PODISUS, H. S.

In the Genera Insectorum, Asopinæ, p. 68, M. Schouteden has reviewed genus *Podisus* as recognized in the Enumeratio, placing the name *Podisus* as a synonym of *Apateticus*, Dallas, and renaming the larger group of species ordinarily called *Podisus* as *Eupodisus*. Evidently he has done this on the "first species" rule, a risky rule to follow in any case, and in this instance particularly unfortunate. Stal has worked out the relations of the various species in this genus with great care, and I can see no reason why we should not follow him. Herrich-Schæffer's first species under his new genus *Podisus*, *punctipennis*, is a straight synonym of *Apateticus halys*, Dallas; his second species, *strigipes*, is an aberrant form, for which Stal has founded the genus *Mineus*, while his fifth species, *albiceps*, is a synonym of *Tynacantha marginata*, Dallas, and must be rejected. This leaves his third and fourth species, *vittipennis* and *pallipes*, which Stal considered as typical of the genus, as he had a perfect right to

do, and consequently adopted the name *Podisus* for this, the largest section of the group, sinking his own genus *Telepta* as a synonym.

I would correct Schouteden so far as to divide this group into two distinct genera: *Apateticus*, Dallas, with *Apœcilus*, Stal, as a subgenus, and *Podisus*, H. S., with subgenus *Tylospilus*, Stal. This would leave *Telepta*, Stal, and *Eupodisus*, Schoutd., as straight synonyms of *Podisus*. I would suggest the following as the most logical arrangement of our North American species of this group:

Genus Apateticus, Dallas.

Subgenus Apateticus, Dallas.

1. *lineolatus*, H. S.
halys, Dallas.
punctipennis, H. S.
2. *marginiventris*, Stal.
Gillettei, Uhler.

Subgenus Apœcilus, Stal.

3. *cynicus*, Say.
grandis, Dallas.
4. *bracteatus*, Fitch.
5. *crocatus*, Uhler.

Genus Podisus, H. S. (Stal).

Subgenus Podisus, H. S. (Stal).

Telepta, Stal.

Eupodisus, Schoutd.

1. *maculiventris*, Say.
spinosus, Dallas.
2. *serieiventris*, Uhler.
3. *modestus*, Dallas.
4. *placidus*, Uhler.
5. *pallens*, Stal.
6. *sagitta*, Fabr.
didymus, P. B.
monospilus, Walker.

7. *fuscescens*, Dallas.

8. *mucronatus*, Uhler.

Subgenus Tylospilus, Stal.

9. *acutissimus*, Stal.

Genus SCOLOPOCERUS, Uhler.

Hitherto this genus has been placed in the *Coreinae*, near *Dasycoris*. It properly belongs to the *Centroscelinae*, near the genera *Althos* and *Catorhintha*, between which it should be located in our lists.

Subgenus XEROCORIS, Van Duzee.

This subgenus of *Narnia* was established by me in 1906 for *Narnia Snowi* and *Wilsoni*. (Ent. News, XVI, p. 385.) *Narnia Snowi* is the type of this subgenus.

FAMILY BERYTIDÆ.

I can see no valid reason why this group should be assigned family rank. I would place it in the *Lygæidæ* as a subfamily, immediately following the subfamily *Cymina*, as has been done by Stal in the Enumeratio.

Neides muticus, Say.

This species has the coriaceous punctured elytra of *Neides*, and certainly belongs there, and not in *Jalysus*, where it is located in the Lethierry and Severin Catalogue.

Cymodema exiguum, Horvath.

I can discover no character by which to distinguish this species from *Cymus breviceps*, Stal. The two descriptions seem to refer to one and the same insect, which inhabits the Atlantic region from New Jersey to Southern Florida. I would place it in *Cymus*, although the second antennal joint is scarcely, if at all, longer than the basal. The sternal sulcation is scarcely indicated.

Belonochilus Koreshanus, Van Duzee.

Dr. Distant has compared examples of this species with the types of his *B. Mexicanus*, and pronounces them sufficiently distinct.

Perigenes fallax, Heidemann.

In the Harris collection is an example of this species under the name *Pamera constricta*, Say. This specimen, which, I understand, was determined by Say himself, wants the head, but I felt no doubt of the identification. Later I sent specimens of *fallax* to Mr. C. W. Johnson for his independent judgment, and he agrees with me in the determination. This is the species formerly determined by me as *constrictus*, Say, and it is so listed in my catalogue of the Hemiptera of Buffalo, but since the publication of Mr. Heidemann's paper I have used Say's name for an allied species, which I now describe as :

Perigenes costalis, n. sp.

Longer and narrower than *constrictus*, with the pale costal margin uninterrupted, the surface nearly smooth, not pilose as in fresh examples of that species. Length, 6-8 mm.

Head closely golden-pubescent, frequently eroded. Cheeks more prominent than in *constrictus*. Pronotum proportionately longer, the constriction nearer the posterior margin, anterior lobe less narrowed anteriorly, the posterior more coarsely punctured. Anterior femora incrassated, armed with three stout spines and a few minute teeth. Genital segment of the male oval, convex at base, beyond which is a broad lunate apical compression. Colour black; antennæ, legs, five longitudinal vittæ on the posterior lobe of the pronotum, the median a slender carina, fulvo-testaceous; apical one-half of the second antennal joint, and sometimes the third joint, a broad annulus on the anterior and posterior femora, and a narrow one on the intermediate, black; apical joint of the antennæ, tips of the tibiæ and tarsi and the rostrum piceous or almost black. Coxæ and hind edge of the pro- and metapleura more or less ochraceous. Elytra mostly blackish, with the edges, the nervures and the costa, sometimes broadly, whitish. There is usually a pale spot on the inner angle of the corium, and in pale examples the whitish areas are more or less punctured with black. Membrane fuliginous with pale nervures. Slender edges of the scutellum ferruginous.

Described from a good series representing both sexes, taken at Hamburg, N. Y., and Columbus, Ohio. On account of its more elongated form and style of marking this insect has a slight resemblance to a stout *Paromius longulus*. Some specimens are almost black, with the slender costa pale. In perfect examples the head and pronotum have a few scattering black hairs.

Genus PYGÆUS, Uhler.

Stal, in 1874, established genus *Salacia*, indicating two sections: "A" with the base of the pronotum and apex of the corium sinuated, and "B" with these margins straight or feebly arcuated. Section "A" was described as a distinct genus by Distant in 1893, and as this was the first and supposedly typical section of Stal's genus his name, *Cligenes*, must replace *Salacia*, which was preoccupied. Section "B" was described the next year by Dr. Uhler as genus *Pygæus*, with one species, *pallidus*, ranging from Canada to the West Indies. Dr. Uhler's species is evidently identical with that described one year later by Dr. Bergroth as *Cligenes*

minutus, and both may be identical with Stal's *Salacia pilosula*, although that author describes the third and fourth joints of the antennæ as of equal length. *Cligenes* has not yet been reported from north of Mexico. *Pygæus* I would retain as a distinct genus with *pilosulus* and *pallidus* as North American species.

Genus ISCHNODEMUS, Fieber.

Heretofore but little has been published on our North American species of this genus, and until very recently but one species, *falicus*, had been recorded from our territory. Descriptions of four new species from Florida and one from the Western States have been published by me during the present year, together with a doubtful recognition of one of the Biologia species, making a total of seven species now known from the United States. The following key may assist in placing these species :

- Rostrum not or scarcely passing the base of the prosternum.....1.
- Rostrum reaching to or behind the middle of the mesosternum.....3.
- 1. Antennæ ferruginous or pale at base.....3. *præcultus*, Dist.
- Antennæ black or somewhat piceous in immature examples.....2.
- 2. Third antennal joint scarcely shorter than the second and fourth ; discal areole of the corium with fuscous veins.....1. *falicus*, Say.
- Third antennal joint distinctly shorter than the second and fourth ; discal areole of the corium immaculate.....2. *rufipes*, Van D.
- 3. Osteolar orifice concolorous, blackish or very obscurely pale.....4.
- Osteolar orifice large and conspicuously pale or rufo-testaceous....5.
- 4. Antennæ stout, basal joint a little longer than thick ; colour black, legs and base of the antennæ dark rufo-castaneous ; hind margin of the pronotum narrowly testaceous.....4. *lobatus*, Van D.
- Antennæ slender, basal joint much longer than thick ; legs and base of the antennæ pale rufo-testaceous ; hind margin of the pronotum broadly rufo-testaceous.....5. *Slossoni*, Van D.
- 5. Black ; pronotum narrowed from its base ; size large.6. *conicus*, Van D.
- Castaneous ; pronotum posteriorly oblong, abruptly narrowed anteriorly ; size medium, form slender.....7. *badius*, Van D.

1. *Ischnodemus falicus*, Say.

Say, Complete Writings, I, p. 331.

This species is widely distributed in the United States, from New York southward, but I did not take it in Florida, which is probably beyond its southern range. Its best differential characters are given in the above key, and more fully in my description of *rufipes*.

2. *Ischnodemus rufipes*, Van Duzee.

Bulletin Buffalo Society of Natural Sciences, IX, p. 167, 1909.
So far as I know this species has been taken only in Florida.

3. *Ischnodemus præcultus*, Distant?

Biologia Centrali Americana, Heteroptera, I, p. 196, 1882.

Last year I received from the late Prof. F. H. Snow two examples of a slender species which agree reasonably well with Distant's short description. These are both brachypterous, and proportionately more slender than is indicated in his figure, and the rostrum is shorter than described by him, scarcely attaining the anterior coxæ; the vertex also is black and pubescent and the size is larger. If not identical, these forms are so close I do not care to describe the present specimens as a distinct species without more material. They were taken by Prof. Snow in the Santa Rita Mts., Arizona, at an altitude of 8,000 feet.

4. *Ischnodemus lobatus*, Van Duzee.

Bulletin Buffalo Society of Natural Sciences, IX, p. 169, 1909.

This is another Florida species which I have not seen from elsewhere. It may be distinguished from the preceding by the longer rostrum and from *badius* by its black colour and the concolorous orifices.

5. *Ischnodemus Slossoni*, Van Duzee.

Entomological News, XX, p. 233, 1909.

Most nearly related to *falicus*, but with more slender antennæ, the base of which are rufo-testaceous, and the rostrum is longer. The types were taken by Mrs. Slosson at Jacksonville, Florida, and I captured one example at Raleigh, N. C.

6. *Ischnodemus conicus*, Van Duzee.

Entomological News, XX, p. 234, 1909.

This is a large species allied to *Sallei*, Sign. It was taken at Galveston, Texas, by the late Prof. Snow.

7. *Ischnodemus badius*, Van Duzee.

Bulletin Buffalo Society of Natural Sciences, IX, p. 168, 1909.

Of this rather large castaneous species I took numbers on the shore grass along Tampa Bay at St. Petersburg, Florida. I do not know of its having been taken elsewhere, but it is not unlikely that it will be found at other places along the Gulf Coast.